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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/985,725	11/06/2001	Alexander Roger Deas	2402	4330

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07/21/2005

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RUSSIAN FEDERATION

EXAMINER

BHATTACHARYA, SAM

ART UNIT	PAPER NUMBER
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2687

DATE MAILED: 07/21/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/985,725

Applicant(s)

DEAS ET AL.

Examiner

Sam Bhattacharya

Art Unit

2687

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 February 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-5,7-14 and 16-28 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3-5,7-14 and 16-28 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
2. Claims 1, 3-5, 7-14 and 16-28 are rejected under 35 U.S.C. 102(e) as being anticipated by Kudou (US 6,374,097 B1).

Regarding claims 1, 4, 8, 16, 21, 22, 25, 26 and 28, Kudou discloses a communication system including a driving circuit 12 having a driver with controlled output voltage or current levels (AGC); and a receiving circuit (circuit components 13-19) with a main receiver having at least one channel for receiving a main signal, wherein the parameters of the driver are adjusted to the receiver's characteristics by using a signal generated by auxiliary circuit (the AGC feedback loop) reproducing one or more characteristics of the main receiver. See FIG. 2, col. 3, lines 59 – col. 4, line 5, and col. 5, lines 26-37.

Regarding claims 3 and 10, Kudou discloses that the auxiliary circuit includes a copy of main receiver, including a signal processor 30 and voltage to current converter 50.

Regarding claim 5, 17 and 18, Kudou discloses that the receiver's characteristics include the reference voltage via the voltage to current converter 50.

Regarding claim 7, Kudou discloses that the auxiliary circuit is incorporated in a ring oscillator circuit, the signal from the ring oscillator being used to adjust the parameters of the driver to the receiver's characteristics. See col. 2, lines 28-35.

Regarding claim 9, Kudou discloses that the auxiliary receiver is used to obtain the information on the main receiver, including a terminating voltage and reference voltage. See col. 4, lines 48-52.

Regarding claim 10, Kudou discloses a communication system comprising: a driving circuit comprising a driver with controlled output voltage or current levels, and a receiving circuit comprising a main receiver having at least one channel for receiving a main signal, wherein the driving circuit comprises an auxiliary circuit, so that the parameters of the driver are adjusted to the receiver's characteristics by using a signal generated by the auxiliary circuit reproducing one or more characteristics of the main receiver. See FIG. 2, col. 3, lines 59 – col. 4, line 5, and col. 5, lines 26-37.

Regarding claim 11, Kudou discloses that the auxiliary circuit comprises a copy of the main receiver.

Claim 12 incorporates the limitations of claims 8 and 10, and is rejected for the same reasons as claims 8 and 10.

Claims 13 and 14 incorporate the limitations of claims 9 and 10, and is rejected for the same reasons as claims 9 and 10.

Regarding claim 19 and 20 Kudou discloses that the signal is digital or differential analog via the digital signal processor 30. See col. 4, lines 16-32.

Claim 23 incorporates the limitations of claims 9 and 21, and is rejected for the same reasons as claims 9 and 21.

Claim 24 incorporates the limitations of claims 3 and 21, and is rejected for the same reasons as claims 3 and 21.

Claim 27 incorporates the limitations of claims 3 and 25, and is rejected for the same reasons as claims 3 and 25.

Response to Arguments

3. Applicant's arguments filed on 2/28/05 have been fully considered but they are not persuasive.

Applicant argues that the amplifier, filter, mixers and oscillators in Kudou are parts of the same selective call receiver, and that none of these units form a communication system that includes a driving circuit and a receiving circuit. Applicant also argues the present invention relates to a communication system comprising a transmitting and a receiving circuit for driving data over a communication cable, whereas Kudou relates to a radio type calling receiver with automatic gain control.

Examiner respectfully disagrees. The amplifier 12 in Kudou makes up the "driving circuit" and the filters/mixers 13-19 make up the "receiving circuit." The structure shown in Kudou reads on the claimed recitations of the present invention because the driving circuit and the receiving circuit does not distinguish over the structure in Kudou. A transmitting circuit and communication system would be inherent to Kudou since any signal received by the selecting call receiver of Kudou would receive the signal from a external transmitter.

Applicant identifies the problem solved by the present invention as reducing the voltage swing. Applicant states that Kudou has no controlled output voltage or current level, and has no levels at all. Applicant also states that no hysteresis of the driver, reproducing circuit or terminating voltage is taught in Kudou.

Examiner respectfully disagrees with Applicant's further arguments. The stated intention of reducing the voltage swing is not recited in the claims. Still, Kudou teaches different voltage swings at a detecting circuit 40. Kudou also teaches controlled output voltage and current levels. See the top and bottom of FIG. 5 and col. 6, lines 8-19, for example. As for hysteresis of the driver, "hysteresis" is defined as a lagging of an effect behind its cause. Thus, as broadly interpreted, hysteresis is inherent to at least a certain extent in the functioning of any circuit component. For example, hysteresis exists in the gain control of the amplifier/driver 12. The claims do not recite a reproducing circuit, although they have been amended to recite an auxiliary circuit that reproduces characteristics of the main receiver. This is, once again, a broad recitation. The AGC feedback loop in Kudou reproduces any number of "characteristics" of the main receiver, thereby meeting this added recitation. Finally, Examiner interprets the "terminating voltage" to be an output voltage, which is disclosed by Kudou.

Since Applicant argues with respect to limitations that are not specifically recited in the claims, Examiner suggests that Applicant amend the claims to include these limitations to distinguish the claimed subject matter from Kudou. Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Conclusion

4. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sam Bhattacharya whose telephone number is (571) 272-7917. The examiner can normally be reached on Weekdays, 9-6, with first Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lester G. Kincaid can be reached on (571) 272-7922. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2687

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

sb


7/20/05
LESTER G. KINCAID
SUPERVISORY PRIMARY EXAMINER